

ASAIO TRANSACTIONS-VOLUME 37

Subject Index

Editors' Note: This index encompasses only the material presented in ASAIO TRANSACTIONS Volume 37, Numbers 1, 2, and 4. Please consult the July-September issue (Vol. 37, No. 3) for an index of the contents of that body of work.

A

- Anion gap, in hemodialysis patients, serum sulfate concentration and, 92
- Artificial organs, 44
 - cost of artificial hearts and, 540
 - experimental studies on artificial trachea of collagen-coated poly(L-lactic acid) mesh or unwoven cloth combined with a periosteal graft, 24
 - mediastinal constraints for total artificial heart and, intraoperative determination of, 76
 - three-dimensional interface geometry of human heart with artificial heart and, 608
 - in vitro* evaluation of artificial heart and, 27
- Assisted circulation
 - investigational circulatory support and, cost and reimbursement rates for, 549
 - pulmonary and systemic flow during, direct measurement of, 112

B

- Balloon counterpulsation, intra-aortic
 - leaks and, causes of, 668
 - in newborn lambs infected with Group B streptococcus, 33
- Biofilms, formation on peritoneal catheters, infection and, 626
- Biomaterials science, 44
- Blind patients, on continuous ambulatory peritoneal dialysis, enhanced outlet port clamp using UVXD device for, 110
- Blood
 - flow/pressure relationships and, in vascular access devices, standardized system for describing, 4
 - power capability of skeletal muscle to pump, 19
- Blood flow, pulmonary and systemic, during assisted circulation, direct measurement of, 112
- Blood suspensions, near wall concentration profiles of 1.0 and 2.5 μ m beads during flow of, 9
- Bradykinin, effect of nafamostat mesilate on generation of, during low-density lipoprotein apheresis using dextran-sulfate cellulose column, 644

C

- Cardiopulmonary bypass
 - monitoring of Factor XII activity and granulocyte elastase release during, 569
 - platelet preservation during, with Iloprost and Duraflo-II heparin-coated surfaces, 620
- Catheters
 - extracorporeal perfusion, evaluation using standardized measurement technique, 60
 - peritoneal, biofilm formation on, infection and, 626

- Chloramine contaminated dialysate, illness in hemodialysis patients after exposure to, 588
- Circulation
 - assisted, pulmonary and systemic flow during, direct measurement of, 112
 - extracorporeal, with normal bleeding times, using surface heparinized circuit, in sheep, 584
- Circulatory support, investigational, cost and reimbursement rates for, 549
- Circulatory system, pumping capabilities of latissimus dorsi and rectus abdominus muscles wrapped around valved pouch in, 615
- Clinical trials, randomized, 41
- Continuous ambulatory peritoneal dialysis, blind patients on, enhanced outlet port clamp using UVXD device for, 110
- Cyclosporine, renal allograft outcome and, intermediate term failure and long-term survival and, 623

D

- Diabetes, hand gangrene in patients on chronic dialysis and, 638
- Dialysis
 - anion gap in hemodialysis patients and, serum sulfate concentration and, 92
 - chronic, hand gangrene in diabetic patients on, 638
 - diseases associated with, surveillance in United States during 1989, 97
 - illness in hemodialysis patients after exposure to chloramine contaminated dialysate and, 588
 - influence of treatment modality on decline of remaining renal function and, 598
 - muscle cramps associated with hemodialysis and, comparison of 50% dextrose water, 25% mannitol, and 23.5% saline for treatment of, 649
- peritoneal
 - continuous ambulatory, blind patients on, enhanced outlet port clamp using UVXD device for, 110
 - mass transport models in, comparative analysis of, 65
 - reuse of "highly permeable" dialyzers with peroxyacetic acid as sole cleansing and disinfecting agent and, 653
 - urea monitoring during, 49
 - withdrawal of, 1

E

- Electronic pacing, of incapacitated head and neck structures, 553
- Extracorporeal blood bypass, long-term, at low flows without systemic heparinization, in dogs, 577
- Extracorporeal circulation, with normal bleeding times, using surface heparinized circuit, in sheep, 584

Extracorporeal membrane oxygenation, for neonates
centrifugal and roller pump systems for, comparison of
pressure-volume-flow relationships in, 572
high risk, as means of stabilizing and transporting patients,
564
pharmacokinetics of gentamicin in neonates supported
with, 16
premature, mortality and, 54
use of umbilical vessels for cannulation and, 545
Extracorporeal perfusion catheters, evaluation using stan-
dardized measurement technique, 60
Extracorporeal respiratory gas exchange, 4

F

Factor XII activity, monitoring of, during cardiopulmonary
bypass, 569
Flow/pressure relationships
comparison of pressure-volume-flow relationships and, in
centrifugal and roller pump extracorporeal mem-
brane oxygenation systems for neonates, 572
in vascular access devices, standardized system for de-
scribing, 4

G

Gangrene, of hand, in diabetic patients on chronic dialysis,
638
Gentamicin, pharmacokinetics of, in neonatal patients sup-
ported with extracorporeal membrane oxygena-
tion, 16
Granulocyte elastase release, monitoring of, during cardio-
pulmonary bypass, 569
Group B streptococcus, intra-aortic balloon counterpuls-
ation in newborn lambs infected with, 33

H

HCO₃ monitoring, during hemodiafiltration, without blood
sampling, 572
Head and neck structures, incapacitated, electronic pacing
of, 533
Heart
artificial
cost of, 540
three-dimensional interface geometry of human heart
with, 608
in vitro evaluation of, 27
myocardial mechanics and energetics and, 537
Hemodiafiltration, continuous pH and HCO₃ monitoring
during, without blood sampling, 605
Hemodialysis
anion gap and, serum sulfate concentration and, 92
illness after exposure to chloramine contaminated dialy-
sate and, 588
muscle cramps associated with, comparison of 50% dex-
trose water, 25% mannitol, and 23,5% saline for
treatment of, 649
Heparin
effect on whole blood activated clotting tests and throm-
bin time, 88
extracorporeal circulation with normal bleeding times us-
ing surface heparinized circuit and, in sheep, 584
long-term extracorporeal blood bypass at low flows with-

out systemic heparinization in dogs and, heparin-
coated versus uncoated circuits and, 577
platelet preservation during cardiopulmonary bypass with
Iloprost and Duraflo-II heparin-coated surfaces
and, 620

I

Infection, biofilm formation on peritoneal catheters and, 626
Intra-aortic balloon counterpulsation
leaks and, causes of, 668
in newborn lambs infected with Group B streptococcus,
33

L

Latissimus dorsi muscle, wrapped around valved pouch in
mock circulatory system, pumping capabilities of,
615
Low-density lipoprotein apheresis, using dextran-sulfate cel-
lulose column, effect of nafamostat mesilate on
bradykinin generation during, 644

M

Mass transport models, in peritoneal dialysis, comparative
analysis of, 65
Medical devices, 44
Muscle
muscle cramps associated with hemodialysis and, compar-
ison of 50% dextrose water, 25% mannitol, and
23,5% saline for treatment of, 649
pumping capabilities of latissimus dorsi and rectus abdo-
minus muscles wrapped around valved pouch in
circulatory system and, 615
skeletal, power capability to pump blood, 19
Muscle cramps, hemodialysis-associated, comparison of
50% dextrose water, 25% mannitol, and 23,5% sa-
line for treatment of, 649
Myocardial mechanics and energetics, 537

N

Nafamostat mesilate, effect on bradykinin generation, dur-
ing low-density lipoprotein apheresis using dex-
tran-sulfate cellulose column, 644
Neonates, extracorporeal membrane oxygenation and
centrifugal and roller pump systems for, comparison of
pressure-volume-flow relationships in, 572
as means of stabilizing and transporting high risk neonates,
564
pharmacokinetics of gentamicin in patients supported
with, 16
premature infants and, mortality and, 54
use of umbilical vessels for cannulation for, 545

O

Outlet port clamp, using UVXD device, for blind patients on
continuous ambulatory peritoneal dialysis, 110

P

Pacing, electronic, of incapacitated head and neck struc-
tures, 553

- Peritoneal dialysis
 - enhanced outlet port clamp using UVXD device and, for blind patients on continuous ambulatory peritoneal dialysis, 110
 - mass transport models in, comparative analysis of, 65
- Peroxyacetic acid, as sole cleansing and disinfecting agent, reuse of "highly permeable" dialyzers and, 653
- pH monitoring, during hemodiafiltration, without blood sampling, 605
- Platelet preservation, during cardiopulmonary bypass, with Iloprost and Duraflo-II heparin-coated surfaces, 620
- Postcardiogenic shock, management of, with pulsatile ventricular assist device, 559
- Premature infants, extracorporeal membrane oxygenation in, mortality and, 54
- Pressure-volume-flow relationships, comparison of, in centrifugal and roller pump extracorporeal membrane oxygenation systems for neonates, 572
- Pulmonary flow, during assisted circulation, direct measurement of, 112
- Pump, with high inherent sensitivity to venous return, *in vitro* flow characteristics of, 592

R

- Randomized clinical trials, 41
- Rectus abdominis muscle, wrapped around valved pouch in mock circulatory system, pumping capabilities of, 615
- Renal allograft, cyclosporine and, intermediate term failure and long-term survival and, 623
- Renal function, influence of dialysis treatment modality on decline of, 598
- Renal osteodystrophy, skeletal surveys in, 635
- Respiratory gas exchange, extracorporeal, 4

S

- Seldinger technique, for Tenckhoff catheter placement, 13
- Shock, postcardiogenic, management of, with pulsatile ventricular assist device, 559

- Skeletal muscle, power capability to pump blood, 19
- Skeletal surveys, in renal osteodystrophy, 635
- Streptococcus, Group B, intra-aortic balloon counterpulsation in newborn lambs infected with, 33
- Sulfate, serum concentration of, anion gap in hemodialysis patients and, 92
- Systemic flow, during assisted circulation, direct measurement of, 112

T

- Tenckhoff catheter placement, Seldinger technique for, 13
- Thrombin time, effect of heparin on, 88
- Total artificial heart, mediastinal constraints for, intraoperative determination of, 76
- Trachea, artificial, of collagen-coated poly(L-lactic acid) mesh or unwoven cloth combined with a periosteal graft, experimental studies on, 24

U

- Umbilical vessels, use for cannulation, extracorporeal membrane oxygenation systems for neonates and, 545
- Urea
 - monitoring of, during dialysis, 49
 - in uremia, removal of, potential of microencapsulated urease-zeolite oral sorbent for, 80
- Uremia, removal of urea in, potential of microencapsulated urease-zeolite oral sorbent for, 80

V

- Vascular access devices, flow/pressure relationships in, standardized system for describing, 4
- Vascular grafts, small, coming generation of, 43
- Ventricular assist device, pulsatile, management of postcardiogenic shock with, 559

W

- Whole blood activated clotting tests, effect of heparin on, 88

Author Index

A

Adkins, Mark S., 37:38
Akutsu, Tetsuzo, 37:608
Allison, Marjory E., 37:49
Alter, Miriam J., 37:97
Amari, Bruno, 37:112
Arduino, Matthew J., 37:588
Arisz, Lambertus, 37:662
Avasthi, Pratap S., 37:638

B

Badylak, S. F., 37:19, 37:615
Baier, R. E., 37:43
Bailey, Bridget M., 37:38
Baird, Jo, 37:49
Bartlett, R. H., 37:60
Bartlett, Robert H., 37:4, 37:54
Bennett, Thomas, 37:549
Bland, Lee A., 37:97, 37:588
Botella, J., 37:605
Broniatowski, Michael, 37:553
Bui, Kim Chi, 37:54
Burkart, John M., 37:649

C

Canaud, B., 37:653
Canzanella, Vincent J., 37:649
Carter, Jan M., 37:564
Cattaneo, Maurizio V., 37:80
Cattani, Carlo, 37:112
Chang, Thomas M. S., 37:80
Cipolle, Robert J., 37:88
Closkey, Gregory M., 37:13
Cornish, J. Devn, 37:545, 37:564
Courtney, James M., 37:569
Cugno, Massimo, 37:584

D

Daskalakis, Paula, 37:623
Davies, Charles R., 37:553
DeBakey, Michael E., 37:76
Delaney, Vera, 37:623
Dewanjee, Mrinal K., 37:620
Dudell, Golde G., 37:545
Dumler, Francis, 37:635

E

Eckstein, Eugene C., 37:9
Eisenberg, Brian, 37:638
Evans, Marva L., 37:545

F

Fabrizik, Irene, 37:584
Farrell, Peter C., 37:598

Favero, Martin S., 37:97, 37:588
Federman, Daniel G., 37:92
Fernandez, Javier, 37:38
Ferrante, Marco, 37:112
Frangos, John A., 37:27
Friedman, Eli A., 37:623

G

Garcia-Maldonado, Maurilio, 37:110
Garred, L. J., 37:653
Gattinoni, Luciano, 37:584
Geddes, L. A., 37:19, 37:615
Geihseider, Gerald, 37:658
Gerstmann, Dale R., 37:564
Gervasio, R., 37:605
Ghezzi, P. M., 37:605
Giuffrida, Angela, 37:584
Goldman, Richard S., 37:638
Gotch, Frank, 37:598
Green, Thomas P., 37:572
Gründeman, Paul F., 37:577
Grundfest-Broniatowski, Sharon, 37:553
Gutierrez, Rodolfo, 37:92

H

Harada-Shiba, Mariko, 37:644
Harford, Antonia M., 37:638
Hatcher, M. D., 37:60
Heidenheim, A. Paul, 37:49
Heimbürger, Olof, 37:65
Hitomi, Shigeki, 37:24
Holmes, C., 37:626
Hong, Joon H., 37:623
Hsu, Lee-Chien, 37:620
Hylander-Rossner, Britta, 37:649

I

Ibels, Lloyd, 37:598
Ikada, Yoshito, 37:24
Ike, Osamu, 37:24
Irmiter, Richard J., 37:572
Irvine, Linda, 37:569

J

Jacobs, Gordon B., 37:553
Janas, W., 37:615
Jarvis, Peter, 37:27
Jarvis, William R., 37:588
Jeremejev, Boris V., 37:658
Jikuya, Tomoaki, 37:76
Jordan, Jean, 37:649
Joyce, Douglas H., 37:38, 37:669

K

Kaan, Gilles L., 37:559
Kaiser, Gerard A., 37:620
Kanig, Steven P., 37:638
Kapadvanjwala, Mansoor, 37:620
Keen, Marcia, 37:598
Keim, Roberto, 37:584
Kimura, Genjiro, 37:644
Klopper, Pieter J., 37:577
Kojima, Shunichi, 37:644
Koleski, Jerome F., 37:9
Kolobow, Theodor, 37:2
Koomen, Gerardus C. M., 37:662
Krediet, Raymond T., 37:662
Kresh, J. Yasha, 37:537
Kriesmer, Pamela, 37:572
Kriesmer, Pamela J., 37:88
Kuramochi, Morio, 37:644

L

LaClair, Paul, 37:54
Lacquet, Leon K., 37:559
Laub, Glenn W., 37:38
Lindholm, Bengt, 37:65, 37:598
Lindsay, Robert M., 37:49
Liska, Jan, 37:592
Lohmann, Douglas, 37:549
Losert, Udo, 37:658
Lowe, Gordon D. O., 37:569
Lundbück, Stig, 37:592
Lysaght, Michael J., 37:598

M

Marcolin, Roberto, 37:584
Massoud, Neil, 37:16
McBride, Lawrence R., 37:549
McCarthy, Mary Ann, 37:588
McGrath, Lynn B., 37:38
Meda, Federico, 37:537
Merli, Mario, 37:112
Merz, S. I., 37:60
Merz, Scott I., 37:4
Messana, J., 37:626
Meyer, Christopher L., 37:572
Mion, C., 37:653
Mohini, Ravinder, 37:635
Montoya, J. P., 37:60
Montoya, J. Patrick, 37:4
Morgan, Timothy M., 37:649
Morris, Alan H., 37:41
Moulijn, Adrian C., 37:577
Moulton, Steven L., 37:545
Moyer, Linda A., 37:97
Müller, Michael R., 37:658
Munzenberger, Paul J., 37:16
Murata, Glen H., 37:638

N

Nguyen, Q. V., 37:653
 Nicolle, R., 37:653
 Nolph, Karl D., 37:598
 Nomura, Shuichi, 37:644
 Noon, George P., 37:76
 Nosé, Yukihiko, 37:76, 37:553
 Novak, Stana, 37:620
 Noyez, Luc, 37:559
 Null, Donald M., Jr., 37:564

O

Okada, Toshiyuki, 37:24
 Omae, Teruo, 37:644
 Oster, James R., 37:92

P

Paino, Roberto, 37:112
 Palatianos, George M., 37:620
 Payne, Nathaniel R., 37:88, 37:572
 Pennington, D. Glenn, 37:549
 Perez, Guido O., 37:92
 Perras, Susan T., 37:13
 Pesenti, Antonio, 37:584
 Poirier, Victor L., 37:540
 Pollock, Carol A., 37:598
 Pollock, Samuel B., 37:38
 Pribble, Charles G., 37:33
 Prowant, Barbara, 37:598

R

Rao, D. Sudhaker, 37:635
 Reedy, Jane E., 37:549
 Reid, Marie H., 37:588
 Rubin, Jack, 37:1
 Rutten, Peter J. J. M., 37:577

S

Saddler, Mark C., 37:638
 Sands, R. Evan, 37:649
 Schima, Heinrich, 37:658
 Schlessinger, Fabiola B., 37:92
 Schlusche, Christoph, 37:658
 Schoen, Frederick J., 37:44
 Schor, Igor, 37:658
 Seay, Russell E., 37:88
 Sekela, Michael E., 37:76
 Semb, Bjarne K. H., 37:592
 Sena, Peter, 37:638
 Sfakianakis, George N., 37:620
 Shaddy, Robert E., 37:33
 Shah, Aamir S., 37:76
 Shimizu, Yasuhiko, 37:24
 Shiono, Motomi, 37:76
 Shusterman, Neil, 37:588
 Simon, Denise, 37:638
 Simpson, Keith, 37:49
 Sinard, J. M., 37:60
 Skotnicki, Stephan H., 37:559
 Smith, Willie, 37:620
 Smith, Z. Marie, 37:110
 Sommer, Bruce G., 37:623
 Spanner, Evelyn, 37:49
 Steinhorn, Robin H., 37:572
 Struijk, Dirk G., 37:662
 Sumrani, Nabil, 37:623
 Sundaram, Sumuk, 37:569
 Sutter, Francis P., 37:38
 Swartz, Marc T., 37:549
 Swartz, R., 37:626
 Sweet, Lawrence D., 37:545

T

Tacker, W. A., 37:615
 Taggart, David P., 37:569
 Takatani, Setsuo, 37:76
 Tarbell, John M., 37:27

Tipple, Margaret A., 37:588
 Tsushima, Motoo, 37:644
 Tucker, Harvey M., 37:553
 Tzamaloukas, Antonios H., 37:638

U

Uden, Donald L., 37:88
 Underwood, John, 37:110
 Uyama, Chikao, 37:608
 Uziel, Ljli, 37:584

V

Vaamonde, Carlos A., 37:92
 van der Hulst, Victor P. M., 37:577
 Vanderkerhove, Janet, 37:54
 van de Wal, Henri, 37:559
 Vincent, Josef G., 37:559
 Vitale, Giovanni, 37:584
 Vonesh, Edward F., 37:598

W

Waniewski, Jacek, 37:65
 Werynski, Andrzej, 37:65
 Wessale, J. L., 37:615
 Wheatley, David J., 37:569
 Williams, J., 37:626
 Wolvek, S., 37:668
 Wood, Barbara, 37:638

Y

Yamamoto, Akira, 37:644
 Young, James B., 37:76

Z

Zager, Phillip G., 37:638
 Zappacosta, Anthony R., 37:13

STATEMENT OF OWNERSHIP, MANAGEMENT AND CIRCULATION (Act of August 12, 1970: Section 3685. Title 39 United States Code) Date of Filing—October 1, 1991; Title of Publication—ASAIO Transactions; Publication No.—08897190; Frequency of Issue—Quarterly; Annual Subscription Price—\$150.00; Location of Known Office of Publication—100 Insurance Way, Suite 114, Hagerstown, MD 21740; Location of the Headquarters or General Business Offices of the Publisher—227 East Washington Square, Philadelphia, PA 19106; Publisher—American Society for Artificial Internal Organs, Inc., P.O. Box C, Boca Raton, FL 33432; Editor—Eli A. Friedman, MD, Box 52, Downstate Medical Center, 450 Clarkson Avenue, Brooklyn, NY 11203; Managing Editor—Lynda Krumpholz, 227 East Washington Square, Philadelphia, PA 19106; Owner—American Society for Artificial Internal Organs, Inc., PO Box C, Boca Raton, FL 33432; Known Bondholders, Mortgagees, and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages, or other securities—None. A. Total no. copies printed (*net press run*), average 2,879, actual 2,800; B. Paid circulation 1. Sales through dealers and carriers, street vendors and counter sales, average none, actual none; 2. Mail subscriptions, average 2,307, actual 2,368; C. Total paid circulation, average 2,307, actual 2,368; D. Free distribution by mail, carrier or other means. Samples complimentary, and other free copies, average 60, actual 93; E. Total distribution (*sum of C and D*), average 2,367, actual 2,461; F. Copies not distributed 1. Office use, leftover, unaccounted, spoiled after printing, average 512, actual 339; 2. Returns from news agents, none; G. Total (*sum of E and F—should equal net press runs shown in A*), average 2,879, actual 2,800. I certify that the statements made by me above are correct and complete. J. W. Lippincott, Publisher.